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05/13/2011 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P. O. Box 3001 BRIARCLIFF MANOR, NY 10510

EXAMINER MCEVOY, THOMAS M ART UNIT PAPER NUMBER

3731

DATE MAILED: 05/13/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,975	07/21/2005	Alastair J. Martin	PHUS030017US	1970

TITLE OF INVENTION: MAGNETIC RESONANCE COMPATIBLE STENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/15/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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			_				(Depositor's name)
			_				(Signature)
							(Date)
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EXAMI		ART UNIT	CLASS-SUBCLASS				
MCEVOY, THOMAS M 3731			623-001150				_
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 			or agents OR, alternate (2) the name of a single	es of up to 3 registered patent attorneys R, alternatively, e of a single firm (having as a member a torney or agent) and the names of up to patent attorneys or agents. If no name is			
PLEASE NOTE: Unle recordation as set forth (A) NAME OF ASSIG	ess an assignee is identi in 37 CFR 3.11. Comp NEE	oletion of this form is NO	data will appear on the T a substitute for filing ar (B) RESIDENCE: (CIT	patent. If an assignent assignment. Y and STATE OR C	OUNT	RY)	ocument has been filed for
Please check the appropris	ate assignee category or	categories (will not be pr	inted on the patent): 4	■ Individual ■ Co	rporatio	on or other private gro	up entity 🖵 Government
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**	SMALL ENTITY statu	s. See 37 CFR 1.27.	☐ b. Applicant is no lo				
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PHILIPS INTELLECTUAL PROPERTY & STANDARDS P. O. Box 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER		
			MCEVOY, THOMAS M		
			<u> </u>		
			ART UNIT	PAPER NUMBER	
			3731		

DATE MAILED: 05/13/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 636 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 636 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
	10/542,975	MARTIN, ALASTAIR J.	
Notice of Allowability	Examiner	Art Unit	
	THOMAS MCEVOY	3731	
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comr IGHTS. This application is	in this application. If not included nunication will be mailed in due course. THIS	 /e
1. This communication is responsive to <u>2/11/2011</u> .			
2. X The allowed claim(s) is/are 13,19,20,22-27.			
 Acknowledgment is made of a claim for foreign priority una)	e been received. e been received in Applicat	ion No	
* Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm	MENT of this application. itted. Note the attached Ex	KAMINER'S AMENDMENT or NOTICE OF	
INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") mus (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date	st be submitted. son's Patent Drawing Revi	ew (PTO-948) attached	
 (b) including changes required by the attached Examiner' Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t DEPOSIT OF and/or INFORMATION about the deposition of the company of	.84(c)) should be written on he header according to 37 (the drawings in the front (not the back) of CFR 1.121(d).	
attached Examiner's comment regarding REQUIREMENT			
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 □ Notice of	Informal Patent Application	
 Notice of Preferences Gled (170-632) DNotice of Draftperson's Patent Drawing Review (PTO-948) 		Summary (PTO-413),	
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No	b./Mail Date s Amendment/Comment	
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner	s Statement of Reasons for Allowance	
c. Liological Material	9. 🔲 Other	<u>_</u> .	
/Thomas McEvoy/ Examiner, Art Unit 3731	/Anhtuan T. N Supervisory P	lguyen/ atent Examiner, Art Unit 3731	

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Election/Restrictions

1. Claim 13 is allowable. The restriction requirement among the different groups, as set forth in the Office action mailed on July 21st 2010, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim. Claims 19, 20 and 22-27, directed to a stent, are no longer withdrawn from consideration because the claims, as amended, require all the limitations of an allowable claim. However, claim 21, directed to a stent is withdrawn from consideration because it does not require all the limitations of an allowable claim.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

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Authorization for this examiner's amendment was given in a telephone interview with Thomas Kocovsky on April 27th 2011.

Please cancel claims 16 and 21

Please amend claims 13, 19, 20, 24, 25 and 27 as follows:

13. A magnetic resonance compatible stent for use in intravascular therapy, the stent comprising:

a plurality of electrically conductive elements arranged in a generally tubular structure, the conductive elements comprising generally diagonally arranged struts with respect to a central axis of the stent to define a diamond-shaped mesh of the conductive elements, the conductive elements comprising:

a plurality of <u>zig-zag</u> loops disposed about a central axis of the stent; and a plurality of linking members for joining the loops such that the loops and linking members form a generally tubular <u>diamond-shaped conductive mesh cylinder[structure]</u> around the central axis of the stent; and

a plurality of non-conductive connector nodes disposed among the conductive elements for directing currents induced by RF signals in an examination region of a magnetic resonance apparatus to flow in the conductive elements such that the currents flowing in adjacent conductive elements cancel each other and a net current flowing in the stent is substantially minimized;

wherein the loops and linking members are connected within the non-conductive connector nodes such that the current flowing through adjacent loops substantially cancel each other.

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19. The stent according to claim [16]13, wherein each zig-zag loop is electrically connected to each neighboring zig-zag loop only once and mechanically connected at a plurality of locations by a plurality of the non-conductive connector nodes.

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- 20. The stent according to claim [16]13, wherein each zig-zag loop is electrically connected to its neighboring zig-zag loop alternately at 90° intervals.
- 24. The stent according to claim 23, wherein the conductive elements in the second layer overlay the conductive elements in the first layer and the [non—conductive]non-conductive connector nodes connect the conductive elements of the first and second layers such that the currents flowing in the conductive elements of the second layer cancel the currents flowing in the conductive elements of the first layer.
 - 25. The stent according to claim [16]13, further including:

a plurality of second electrically conductive struts connected by a plurality of second non-conductive connector nodes[insulating nodes] to define a diamond-shaped mesh of the second conductive struts, the plurality of second conductive struts and second non-conductive connector nodes[insulating nodes] being disposed in a second cylinder to define a second generally tubular diamond-shaped conductive mesh, the second conductive struts being electrically connected to define a plurality of second

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electrically conductive loops of second conductive struts in a <u>zig-zag</u>[zig zag] pattern extending peripherally around the second cylinder, each second loop being electrically connected in such a manner that currents induced in the second loops during a magnetic resonance examination flow in opposite peripheral directions to currents flowing in adjacent loops of the first cylinder and are substantially cancelled by one another.

27. The stent according to claim_13, further comprising:

first and second layers of the diamond shaped mesh with an elastic layer of non-conductive material in between, each conductive mesh layer including a plurality of the electrically conductive struts connected by the non-conductive connector nodes[insulating nodes] to define a conductive pattern along which the currents induced by the [MR]magnetic resonance system flow, the conductive patterns of the first and second conductive mesh layers overlaying each other and being configured such that the current induced in the conductive pattern of the first layer is equal and opposite to the current induced in the conductive pattern of the second layer such that the currents cancel each other.

3. The following is an examiner's statement of reasons for allowance:

There is no prior art alone or in combination that discloses *inter alia*: a stent having a diamond-shaped mesh pattern formed by electrically conductive struts, circumferential loops, linking members and non-conductive connector nodes where an

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electrical current flowing around a loop would be cancelled by an electrical current flowing around an adjacent loop whereby the net current flowing through the stent is substantially minimized. The prior art discloses stent patterns where an electrical current that could flow around one circumferential loop would be cancelled by an electrical current flowing around an adjacent circumferential loop but not for a stent having a diamond-shaped mesh structure as claimed.

Page 6

- 4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS MCEVOY whose telephone number is (571)270-5034. The examiner can normally be reached on M-F, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas McEvoy/ Examiner, Art Unit 3731

/Anhtuan T. Nguyen/ Supervisory Patent Examiner, Art Unit 3731 04/28/2011